

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) ⓘ  
Terms: **patno=5804421** ([Edit Search](#))

909725 (08) 5804421 September 8, 1998

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT  
**5804421**

♦ [GET 1st DRAWING SHEET OF 2](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text.  
If you do not have this FREE reader, you can download it now from [www.adobe.com](http://www.adobe.com).

[Link to Claims Section](#)

September 8, 1998

High level of expression of ingap in bacterial and eukaryotic cells

**REISSUE:** Reissue Application filed Sep. 8, 2000 (O.G. Nov. 21, 2000) Ex. Gp.: 1652; Re. S.N. 09/659,379, (O.G. November 21, 2000)

**INVENTOR:** Vinik, Aaron I., Norfolk, VA; Pittenger, Gary L., Virginia Beach, VA; Rafaeloff-Phail, Ronit, Chesapeake, VA; Barlow, Scott W., Norfolk, VA

**APPL-NO:** 909725 (08)

**FILED-DATE:** August 12, 1997

**GRANTED-DATE:** September 8, 1998

**ASSIGNEE-AT-ISSUE:** Eastern Virginia Medical School of the Medical College of Hampton Roads, Norfolk, VA

**ASSIGNEE-AFTER-ISSUE:** December 2, 1997 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., EASTERN VIRGINIA MEDICAL SCHOOL OF THE MEDICAL COLLEGE OF HAMPTON ROADS NORFOLK VIRGINIA, Reel and Frame Number: 008836/0649

**LEGAL-REP:** Banner & Witcoff, Ltd.

**PUB-TYPE:** September 8, 1998 - Utility Patent having no previously published pre-grant publication (A)

**PUB-COUNTRY:** United States (US)

**REL-DATA:**

Addition of Ser. No. 741096, October 30, 1996

**US-MAIN-CL:** 435#691

**US-ADDL-CL:** 435#252.3, 435#320.1, 530#350, 536#231, 536#235, 536#241

**CL:** 435, 530, 536

**SEARCH-FLD:** 435#691, 435#252.3, 435#320.1, 536#231, 536#235, 536#241, 530#350

Source: [Legal > Area of Law - By Topic > Patent Law > Patents > U.S. Patents > Utility, Design and Plant Patents](#) ⓘ  
Terms: **patno=5804421** ([Edit Search](#))

**909725** (08) 5804421 September 8, 1998

*Applicant*

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT  
**5804421**

◆ [GET 1st DRAWING SHEET OF 2](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text.  
If you do not have this FREE reader, you can download it now from [www.adobe.com](http://www.adobe.com).

[Link to Claims Section](#)

September 8, 1998

High level of expression of ingap in bacterial and eukaryotic cells

**REISSUE:** Reissue Application filed Sep. 8, 2000 (O.G. Nov. 21, 2000) Ex. Gp.: 1652; Re. S.N. 09/659,379, (O.G. November 21, 2000)

**INVENTOR:** Vinik, Aaron I., Norfolk, VA; Pittenger, Gary L., Virginia Beach, VA; Rafaeloff-Phail, Ronit, Chesapeake, VA; Barlow, Scott W., Norfolk, VA

**APPL-NO:** **909725** (08)

**FILED-DATE:** August 12, 1997

**GRANTED-DATE:** September 8, 1998

**CORE TERMS:** protein, ingap, cell, minute, sequence, buffer, nucleotide, gel, construct, sub ...

**ENGLISH-ABST:**

Removal of the nucleotide sequence encoding the signal peptide from the INGAP coding sequence allows cultured cells to express substantial amounts of INGAP activity. Previous attempts have provided only low yields of INGAP, possibly because the signal sequence of INGAP is toxic to the cells.

Source: [Legal > Area of Law - By Topic > Patent Law > Patents > U.S. Patents > Utility, Design and Plant Patents](#) ⓘ

Terms: **patno=5804421** ([Edit Search](#))

View: **Custom**

Segments: Abst, Appl-no, Cert-correction, Date, Disclaimer-date, Granted-date, Inventor, Patno, Reexam-cert, Reexam-litigate, Reissue, Rel-appl-date, Title

Date/Time: Thursday, February 20, 2003 - 11:03 AM EST

[About LexisNexis](#) | [Terms and Conditions](#)

**LexisNexis™ The Total Research System** [Practice Area Pages](#) [Change Client](#) [Options](#) [Feedback](#) [Sign Off](#) [Help](#)

**Search** [Search Advisor](#) [Get a Document](#) [Shepard's® - Check a Citation](#)

**Sources** [Guided Search Forms](#) [Command Searching](#)

**ECLIPSE™** [History](#) [Help](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Multi-Source Groups](#) > [Patent Cases from Federal Courts and Administrative Materials](#) ⓘ

#### Enter Search Terms

☒ Terms and Connectors ☐ Natural Language

5804421 or 5,804,421

**Search**

Use connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)

☒ Suggest Words and Concepts for Entered Terms

☒ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions ☒ ☐ From  To

[Search](#) | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)  
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)  
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

## No Documents Found!

No documents were found for your search (**5804421** or **5,804,421**). Please edit your search and try again. You may want to try one or more of the following:


- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.


---

**Edit Search**

[About LexisNexis](#) | [Terms and Conditions](#)

[Copyright ©](#) 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

 **LexisNexis™ The Total Research System** [Practice Area Pages](#) [Change Client](#) | [Options](#) | [Feedback](#) | [Sign Off](#) | [Help](#)

**Search** [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#) [ECLIPSE™](#) | [History](#) 

**Sources** [Guided Search Forms](#) [Command Searching](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Legal News](#) > [Patent, Trademark & Copyright Periodicals, Combined](#) 

#### Enter Search Terms

☒ Terms and Connectors ☐ Natural Language

5804421 or 5,804,421

 **Search** 

Use connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)

 Suggest Words and Concepts for Entered Terms

 Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions  ☐ From  To

[Search](#) | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)  
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)  
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

## No Documents Found!

No documents were found for your search (5804421 r 5,804,421). Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

---

**Edit Search**


[About LexisNexis](#) | [Terms and Conditions](#)

[Copyright](#) © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

**LexisNexis™ The Total Research System** [Practice Area Pages](#) [Change Client](#) | [Options](#) | [Feedback](#) | [Sign Off](#) | [Help](#)

**Search** [Search Advisor](#) > [Get a Document](#) > [Shepard's® - Check a Citation](#) >

**Sources** [Guided Search Forms](#) [Command Searching](#)

**ECLIPSE™** | [History](#) | 

[News & Business](#) > [News](#) > [News Group File, Most Recent Two Years](#) ⓘ

#### Enter Search Terms

☒ Terms and Connectors ☐ Natural Language

5804421 or 5,804,421

**Search**

Use connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)

+ Suggest Words and Concepts for Entered Terms

+ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions ☒ From  To

[Search](#) | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)  
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)  
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

## No Documents Found!

No documents were found for your search (5804421 r 5,804,421). Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

---

**Edit Search**

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.